

EXHIBIT 12

DECLARATION OF PETER HART

I, Peter Hart, declare as follows:

1. I am the Staff Attorney at Wilderness Workshop ("WW"). WW is a 501(c)(3) dedicated to preservation and conservation of the wilderness and natural resources of the White River National Forest and adjacent public lands, including those within the Bureau of Land Management's (BLM) Colorado River Valley, Uncompahgre, Gunnison and the Grand Junction Field Offices. WW engages in research, education, legal advocacy and grassroots organizing to protect the ecological integrity of local landscapes and public lands. WW focuses on the monitoring and conservation of air and water quality, wildlife species and habitat, natural communities and lands of wilderness quality. WW was founded in 1967 and has approximately 800 members. Many of our members live, work, and recreate in and around, and otherwise use and enjoy lands managed by the BLM. All members have a great interest in the protection and enhancement of natural values in the area. Numerous WW members live in Western Colorado because of the area's unique climate, and they are concerned about the impacts that human caused climate change is having on local public lands and local communities. Many of our members are also concerned about how public land managers regulate fossil fuel development on public lands and the economic, social, and environmental impacts of development of federal minerals in our area.

2. While the BLM's new methane waste prevention rule is not perfect, it represents a significant step forward in addressing the rampant waste of methane from oil and gas operations on public and tribal lands. The rule is a much-needed update to waste guidance that was adopted 36 years ago.

3. The updated rule will better protect the interests of WW and its members. Our members live in and around the Piceance Basin, which is one of the largest natural gas reservoirs in the country. Natural gas is currently being developed in the area and will continue to be developed on federal public lands for the foreseeable future. Nearly all of our 800 members live, work, or recreate in areas where natural gas development is having an impact. Some of our members reside on “split estate” lands where the federal government owns the minerals underlying the property, or they live in close proximity to federal lands where oil and gas development has been proposed.

4. BLM’s new methane waste rule will require or incentivize oil and gas operators to take measures to reduce natural gas waste from BLM-administered mineral leases. The Rule’s reductions in venting, leaking, and flaring will decrease volatile organic compound emissions that contribute to the formation of ozone. Ozone contributes to asthma, emergency room visits, and premature mortality, and its reduction will improve the health of WW’s members.

6. In addition to reducing the risk to the health of our members, the Rule will also protect and enhance plant life. Ozone also inhibits vegetation growth. Reduced ozone levels as a result of the Rule’s limits and incentives will benefit WW’s members who farm and ranch, as well as protect local ecosystems that our members enjoy for hiking, camping, and other recreation.

7. The Rule will also decrease emissions of hazardous air pollutants, including carcinogens like benzene, and particulate matter and nitrogen oxides, providing additional health benefits to WW’s members, wildlife, and local ecosystems—including high alpine lakes where we have monitored atmospheric deposition for decades.

8. Reduced venting and flaring as a result of the Rule will also improve visibility by reducing ozone, nitrogen oxides, and particulate matter emissions, improving recreational

opportunities for WW's members. Likewise, flaring reductions will benefit WW members who experience noisy and unsightly flares throughout the day and night near their homes, while traveling through the Piceance Basin, or in the areas where they enjoy recreating. Wilderness Workshop's members enjoy some of the nation's most scenic lands in our working area, including iconic natural areas like the Roan Plateau and the Maroon Bells. Air degradation resulting from oil and gas development is occurring in these areas and it remains an ongoing concern of our members.

9. The Rule will also provide royalties, some of which are allocated to states to spend in areas economically impacted by mineral development. WW's members live in areas that are impacted by oil and gas development and will benefit from these expenditures in their communities. For example, many of our members reside in Garfield County, where much of the existing oil and gas development has occurred in Western Colorado. Royalties associated with natural gas development on local public lands support local libraries, public schools, nonprofits, emergency services, and infrastructural improvements.

10. If the Rule is struck down, the aforementioned benefits will be lost. WW's members would face increased health risks posed by ozone, hazardous air pollutants, and particulate matter. Damage from these pollutants to the landscape and the environment also would diminish our members' use and enjoyment of local federal lands. WW's members will lose the increased royalties paid under the Rule that would benefit their communities.

11. While the Rule is an improvement over the status quo, it does have shortcomings, and therefore Wilderness Workshop does not believe that BLM can adequately represent the interests of our members. For example, the rule permits flaring across a wide range of oil and gas operations, even though flaring contributes to climate change and acid rain and is an unsightly

source of noise and light pollution. The Rule also fails to include consideration of social costs in the benefit-cost test that appears throughout the Rule that provides alternative limits to waste prevention measures. This is despite the fact that the oil and gas resource is a public trust resource managed for the benefit of all Americans.

12. Another shortcoming is that the Rule allows BLM to issue variances exempting oil and gas operations on federal leases across an entire state or tribal reservation from specific provisions of the Rule. This provision creates the potential for abuse and the dilution of the Rule's protections. If abuse of the variance provision occurs, it would undercut the Rule's benefit to our members.

13. I am aware that several states and industry trade groups have sued BLM, seeking to have the Waste Prevention Rule vacated by a court. I am also aware that the industry trade groups are asking the court to enjoin (i.e., prohibit the enforcement of) the Rule pending the outcome of their lawsuit. An injunction prohibiting the enforcement of the Rule would be contrary to the interests of Wilderness Workshop members and to the public interest more generally. The benefits to the public of reducing methane emissions through compliance with the Rule can be monetized. These monetary benefits are based on estimates of the social cost of carbon and methane that have been developed by the Interagency Working Group on Social Cost of Carbon and recent work on the social cost of methane. Given limitations in the models used to derive these estimates, such as the exclusion of catastrophic impacts and other unqualified damages, these models are likely to underestimate the benefits of avoiding methane emissions. Nonetheless, on the basis of the social cost of methane and other conservative assumptions, the BLM estimates that the Rule's net benefits could range from \$46 to \$204 million per year. These figures incorporate both the social benefits of reducing methane emissions and additional

revenues for operators from sale of recovered natural gas. If the Waste Prevention Rule is enjoined, these benefits, including significant social benefits, would be lost. Wilderness Workshop members and the public would be harmed.

14. The Rule has numerous other social benefits in addition to the social benefits of reducing climate change impacts, such as the reduction of volatile organic compounds and therefore the reduction of ozone. Ozone reductions provide numerous public health benefits. For example, a 2012 study found that annual numbers of avoided ozone-related premature deaths would range from 1,410 to 2,480 at 75 ppb to 2,450 to 4,130 at 70 ppb, and 5,210 to 7,990 at 60 ppb. Jesse D. Berman et al., Health Benefits from Large-Scale Ozone Reduction in the United States. *Environ Health Perspect* 120:1404–1410. In October of 2015, EPA revised the health-based ambient air quality standard for ozone pollution to 70 parts per billion. Some Wilderness Workshop members live in areas where ozone levels approach or exceed 70 parts per billion. The Berman study also found that in the data years of 2005, 2006, and 2007, acute respiratory symptoms would have been reduced by 3 million cases and school-loss days by 1 million cases annually if only the then-current 75-ppb standard had been attained. *Id.* If the Waste Prevention Rule is enjoined, public health benefits of reduced ozone formation will be lost.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on November 30th, 2016.



Peter Hart

Staff Attorney, Wilderness Workshop

EXHIBIT 13

DECLARATION OF MICHAEL EISENFELD

I, Michael Eisenfeld, declare as follows:

1. My name is Michael Eisenfeld. I am more than 18 years of age and a citizen of the United States. I have lived in Farmington, New Mexico since 1996. I work for San Juan Citizens Alliance (SJCA) as the Energy and Climate Program Manager. I am also a member of SJCA. SJCA is a grassroots organization dedicated to social, economic, and environmental justice in the San Juan Basin. SJCA advocates for clean air, pure water, and healthy lands – the foundations of resilient communities, ecosystems and economies in the San Juan Basin. SJCA has 800 members, including approximately 50 members in New Mexico.

2. In my position as Energy and Climate Program Manager at SJCA, I work on issues related to energy, water quality, air quality, public lands, and public health. I have participated in projects overseen by the U.S. Department of the Interior, Bureau of Land Management (BLM) since 2007. These projects include participation in oil and gas lease sales and specific oil and gas projects, including commenting on Environmental Assessments prepared by BLM in the Farmington Field Office in New Mexico and in the Tres Rios Field Office in Colorado. It has been reported that 94% of the public (federal) lands in the BLM Farmington Field Office are open for oil and gas leasing.¹ The BLM has already leased 85-90% of public lands in the Farmington Field Office for oil and gas historically.

3. While the BLM's new methane waste prevention rule is not perfect, it represents a significant step forward in addressing the rampant waste of methane from oil and gas operations

¹ http://wilderness.org/sites/default/files/TWS%20DataMapInsert_0.pdf

on public and tribal lands. The rule is a much-needed update to waste guidance that was adopted 36 years ago.

4. According to studies by the National Aeronautics and Space Administration (NASA), the largest concentration of methane hovers over the Four Corners Region where I live. This large concentration has been referred as a “methane hotspot” where the largest methane emitters are natural gas facilities. There are over 40,000 oil and gas wells in the Four Corners Region. There also gas processing plants and storage facilities throughout the Four Corners Region. Many of these wells are on federal land and are permitted and managed by the BLM. I am aware that methane is a greenhouse gas, approximately 86 times as potent as carbon dioxide. I am concerned that methane emissions in the Four Corners Region are adversely impacting the health of my family and SJCA members.

5. The updated rule will better protect the interests of SJCA and its members. SJCA members live in the states where oil and gas is currently being developed, or may be developed in the future on federal public lands, including approximately 750 members in Colorado, and 50 members in New Mexico.

6. Numerous SJCA members recreate on public lands near where oil and gas development is occurring or has been proposed. Other members reside on “split estate” lands where the federal government owns the minerals underlying the property, or they live in close proximity to federal lands where oil and gas development has been proposed.

7. BLM’s new methane waste rule will require or incentivize oil and gas operators to take measures to reduce natural gas waste from BLM-administered mineral leases. The Rule’s reductions in venting, leaking, and flaring will decrease volatile organic compound emissions

that contribute to the formation of ozone. Ozone contributes to asthma, emergency room visits, and premature mortality, and its reduction will improve the health of SJCA's members.

8. In addition to reducing the risk to the health of our members, the Rule will also protect and enhance plant life. Ozone also inhibits vegetation growth. Reduced ozone levels as a result of the Rule's limits and incentives will benefit SJCA's members who farm and ranch, as well as protect local ecosystems that our members enjoy for hiking, camping, and other recreation.

9. The Rule will also decrease emissions of hazardous air pollutants, including carcinogens like benzene, and particulate matter and nitrogen oxides, providing additional health benefits to SJCA's members and local ecosystems.

10. Reduced venting and flaring as a result of the Rule will also improve visibility by reducing ozone, nitrogen oxides, and particulate matter emissions, improving recreational opportunities for SJCA's members. Likewise, flaring reductions will benefit SJCA's members who experience noisy and unsightly flares throughout the day and night near their homes or in the areas where they enjoy recreating.

11. The Rule will also provide royalties, some of which are allocated to states to spend in areas economically impacted by mineral development. SJCA's members live in areas that are impacted by oil and gas development and will benefit from these expenditures in their communities.

12. If the Rule is struck down, the aforementioned benefits will be lost. SJCA's members would face increased health risks posed by ozone, hazardous air pollutants, and particulate matter. Damage from these pollutants to the landscape and the environment also would diminish those members' enjoyment from recreating on federal public lands. SJCA's members will lose the increased royalties paid under the Rule that would benefit their communities.

13. While the Rule is an improvement over the status quo, it does have shortcomings, and therefore SJCA does not believe that BLM can adequately represent the interests of our members. For example, the rule permits flaring across a wide range of oil and gas operations, even though flaring contributes to climate change and acid rain and is an unsightly source of noise and light pollution. The Rule also fails to include consideration of social costs in the benefit-cost test that appears throughout the Rule that provides alternative limits to waste prevention measures. This is despite the fact that the oil and gas resource is a public trust resource managed for the benefit of all Americans.

14. Another shortcoming is that the Rule allows BLM to issue variances exempting oil and gas operations on federal leases across an entire state or tribal reservation from specific provisions of the Rule. This provision creates the potential for abuse and the dilution of the Rule's protections. If abuse of the variance provision occurs, it would undercut the Rule's benefit to our members.

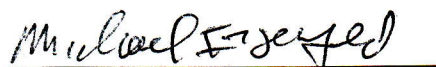
15. I am aware that several states and industry trade groups have sued BLM, seeking to have the Waste Prevention Rule vacated by a court. I am also aware that the industry trade groups are asking the court to enjoin (i.e., prohibit the enforcement of) the Rule pending the outcome of their lawsuit. An injunction prohibiting the enforcement of the Rule would be contrary to the public interest. The benefits to the public of reducing methane emissions through compliance with the Rule can be monetized. These monetary benefits are based on estimates of the social cost of carbon and methane that have been developed by the Interagency Working Group on Social Cost of Carbon and recent work on the social cost of methane. Given limitations in the models used to derive these estimates, such as the exclusion of catastrophic impacts and other unqualified damages, these models are likely to underestimate the benefits of avoiding

methane emissions. On the basis of the social cost of methane and other conservative assumptions, the BLM estimates that the Rule's net benefits could range from \$46 to \$204 million per year. These figures incorporate both the social benefits of reducing methane emissions and additional revenues for operators from sale of recovered natural gas. If the Waste Prevention Rule is enjoined, these benefits, including significant social benefits, would be lost.

16. The Rule has numerous other social benefits in addition to the social benefits of reducing climate change impacts, such as the reduction of volatile organic compounds and therefore the reduction of ozone. Ozone reductions provide numerous public health benefits. For example, a 2012 study found that annual numbers of avoided ozone-related premature deaths would range from 1,410 to 2,480 at 75 ppb to 2,450 to 4,130 at 70 ppb, and 5,210 to 7,990 at 60 ppb. Jesse D. Berman et al., *Health Benefits from Large-Scale Ozone Reduction in the United States*. *Environ Health Perspect* 120:1404–1410. In October of 2015, EPA revised the health-based ambient air quality standard for ozone pollution to 70 parts per billion. Many SJCA members live in areas that have ozone levels near and above 70 parts per billion. The Berman study also found that in the data years of 2005, 2006, and 2007, acute respiratory symptoms would have been reduced by 3 million cases and school-loss days by 1 million cases annually if only the then-current 75-ppb standard had been attained. *Id.* If the Waste Prevention Rule is enjoined, public health benefits of reduced ozone formation will be lost.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on November 29, 2016.

A handwritten signature in cursive script, reading "Michael Eisenfeld", written over a horizontal line.

Michael Eisenfeld

Energy and Climate Program Manager, SJCA